



HEALTH AFFAIRS

Handbook of Guidance, Policy, and Common Assumptions for Assessment of Information Management/Information Technology Benefits in the Military Health System

Supplement (Toolkit) - Part 3

Prepared By:
**Office of the Assistant Secretary of Defense (Health Affairs)
Information Management, Technology and Reengineering**

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Preface

“As Military Health System (MHS) managers engage in the process of implementing the MHS Information Management/Information Technology (IM/IT) Benefits Management Program (BMP) across the MHS, specific, detailed, technical questions may arise. This document is an additional tool for MHS managers to reference as they implement this program and is intended to be used as a supplement to the MHS IM/IT Benefits Management Program Guidebook.”

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OVERVIEW

In March 1997, the Office of the Assistant Secretary of Defense (Health Affairs) stated:

Military Health Services System Information Management (IM)/Information Technology (IT) benefits shall be evaluated, documented and maintained within existing decision and IM/IT review processes, using a Benefits Life Cycle Management approach; estimates will be data-driven, standards used, and oversight processes appropriately instituted and carried out during the entire program life cycle.¹

The Military Health System (MHS) IM/IT Benefits Management Program (BMP) was instituted to oversee the Benefits Life Cycle Management process for the six Business Areas then extant within Health Affairs (HA): Clinical, Executive Information and Decision Support, Logistics, Resources, Infrastructure, and Theater. The BMP program was given the following responsibilities:

- Ensure consistent, accurate, and timely benefit-cost analyses across the Business Areas
- Improve benefit-cost assessment, realization, and management methods
- Provide policies, standard tools, and proven techniques

As part of the task of ensuring consistent benefit-cost analyses of MHS IM/IT initiatives, the BMP developed a list of standardized assumptions and guidance to be used by the Business Areas in calculating benefits. This list is intended to be all-inclusive; Business Areas should use those assumptions and guidance that are applicable. Although current benefits calculations explicitly define the methodology used, underlying assumptions may vary. To ensure consistency across the Business Areas, the BMP effort first prepared a standard list of assumptions and guidance implicit in current benefit-cost analyses. The BMP then determined a specific value, data source, or methodology to be used to calculate that value.

The purpose of this document, then, is to provide a unifying source for major principles, guidelines, directives, and assumptions, for IM/IT benefits management. It forms an important addition to the BMP Toolkit and for those producing and evaluating benefit-cost analyses of IM/IT for the MHS.

It should be understood at the outset that Department of Defense (DoD) guidance on benefit-cost analyses of IT is in a state of flux. Several key documents, in particular Draft DoD 8020.1-M, Draft DoD 8120.2-M, the *Functional Economic Analysis (FEA) Guidebook*, and the Program Analysis and Evaluation *Economic Analyses for Automated Information Systems* guide, continue

¹ Health Affairs Policy memorandum 97-039, Policy for the MHS Information Management/Information Technology Benefits Management Program, 14 March 1997.

to circulate but were never formally approved. Revisions to DoD 5000.2-R continue as of this writing, with final release expected in February 2000.²

The list is divided into three categories: guiding principles, Federal and DoD policy and directives, and specific HA assumptions. Principles are overarching ideas that should underpin any benefit-cost analysis. These reflect underlying values and core methodologies for developing IM/IT benefit-cost analysis. Guidance and directives are either requirements or interim policy that MHS programs should follow. Where possible the actual guidance or policy document has been included in its entirety here. Specific HA level assumptions are less imperative, and reflect the current understanding of planned direction for the MHS.

The first category lists “guiding principles” for calculating IM/IT benefits. These guiding principles apply to all analyses, regardless of scope, for all IM/IT initiatives.

² USD(A&T) memorandum dated 5 August 1999, “Policy Changes to Improve the Acquisition Process.” Note that DoD 5000.2-R cancels DoDI 8120.2, “Automated Information System Life-Cycle Management Process, Review, and Milestone Approval Procedures,” 14 January 93.

1. GUIDING PRINCIPLES FOR CALCULATING IM/IT BENEFITS

1.1 Costs Should Be Equitably Distributed Among Business Areas, TIMPO, and Military Departments.

1.2 IM/IT Benefits Should Be Traced to the MHS IM/IT Strategic Plan and the MHS Mission and Goals.

1.3 A Fixed Base Year Should Be Established as a Reference Point (As-Is state) For IM/IT Benefits Assessment.

1.4 Duplication of Benefits Across Multiple Initiatives is to Be Avoided.

The second category is composed of guidance and directives from Department of Defense (DoD) and other Federal agencies regarding IM/IT and benefit-cost.

2. FEDERAL AND DEPARTMENT OF DEFENSE GUIDANCE AND DIRECTIVES FOR BENEFITS CALCULATIONS

2.1 Follow DoD 7041.3 and, Where Applicable, DoD Program Analysis and Evaluation.

2.1.1 Define year project reaches Full Operational Capability (FOC).

2.1.2 Project life cycle extends for 10 years after FOC.

2.1.3 Use constant dollars for financial ROI reporting.

2.1.4 Calculate As-Is and To-Be mission costs for use in financial ROI calculation.

2.1.5 Assess uncertainty around benefits.

2.1.6 Assume a major technological refreshment for replacement of obsolete hardware four to six years after FOC is attained.

2.2 Follow OMB Circular A-94 For Discounting Future Costs and Benefits.

2.3 Incorporate Inflation Using DoD Rates From USD (Comptroller).

2.4 Assume a Major Technological Refreshment For Replacement of Obsolete Hardware Four to Six Years After FOC is Attained.

The third category is made of particular assumptions by Business Areas as appropriate to carry out benefit-cost calculations. These assumptions are more fluid than the directives and principles outlined above; they should be discussed regularly by participants in Benefits Management and

updated as further information (for example, additional rounds of Base Realignment and Closure) becomes available.

3. COMMON ASSUMPTIONS UNDERLYING COST AND BENEFIT ASSESSMENT OF IT INITIATIVES IN THE MHS³

3.1 Future Size of MHS

3.1.1 Future Base Realignment and Closure: Hold number of facilities constant throughout projection period unless directed otherwise.

3.1.2 Number of Providers: Hold number of providers constant throughout projection period unless directed otherwise.

3.1.3 Number of Beneficiaries (Population Projections for Period): Use MCFAS (see the CEIS Web site: <http://www.ceis.ha.osd.mil>) projections of beneficiaries.

3.1.4 Demand For Health Care: Either hold constant or use EBC Equivalent Lives (see the EBC Web site <http://www.tricare.ha.osd.mil/ebc/>) to project demand for health care.

3.1.5 Active Duty Endstrength Projections: Use MCFAS projections.

3.1.6 Wartime Medical Requirements: Use Current Requirements.

3.2 Use Lease Costs for All Desktop Hardware.

3.3 Determine Infrastructure Availability and Division of Infrastructure Cost; It Will Vary By Project. Discuss with TIMPO the Division to Be Used.

3.4 Use U.S. Bureau of Labor Statistics Previous Year Rate of Inflation in Consumer Price Index - Medical Care for Inflation in Medical Care Costs.

3.5 Compare As-Is (Baseline) Mission Performance and To-Be (Goal) Mission Performance to Calculate Nonfinancial ROI.

³ In a series of meetings, the MHS Benefits Management Integrated Product Team discussed and agreed to this set of common assumptions. These do not represent new policy, but instead reflect consensus on existing practices.

Appendix A

Federal and DoD Guidance and Policy: Documents and Directions

MHS IM/IT benefit-cost analysts should be familiar with the following documents:

“Raines’ Rules”	http://www.whitehouse.gov/OMB/ memoranda/m97-02.html
OMB Circular A-130	http://www.whitehouse.gov/OMB/ circulars/a130/a130.html
OMB Circular A-94	http://www.whitehouse.gov/OMB/ circulars/a094/a094.html
OMB Circular A-11, Part 3, Capital Programming Guide	http://www.whitehouse.gov/ OMB/circulars/a11/a11-99.pdf http://www.whitehouse.gov/ OMB/circulars/a11/cpgtoc.html
DoD 5000.2-R, currently in revision by ASD(C3I)	http://www.acq.osd.mil/sa/asm/ product.htm
DoDI 7041.3	http://web7.whs.osd.mil/text/i70413p .txt
DoD Program Analysis and Evaluation <i>AIS Economic Analysis</i> Guide	www.c3i.osd.mil/bpr/bprcd/ 7222m1.htm
Relevant Service-specific guidance for Economic Analysis, for example, the Department of the Army <i>Economic Analysis Manual</i> (AR 11) or Air Force Manual 65-506 <i>Economic Analysis</i> . Also see: The Defense Economic Analysis Council and Defense Resources Management Institute <i>Economic Analysis Handbook</i> : http://vislab-www.nps.navy.mil/~drmi/econanal.htm	Service specific: Army: http://www.ceac.army.mil/ Navy: http://www.ncca.navy.mil/ Air Force: http://www.saffm.hq.af.mil/
The MHS IM/IT BMP Guidebook and Toolkit	
Annual <i>National Defense Budget Estimates</i> (the “Green Book”)	http://www.dtic.mil/comptroller/ FY2000budget/
Consumer Price Index-Urban, for Medical Services, can be found at the Bureau of Labor Statistics home page.	http://stats.bls.gov/top20.html#CPI